

Segment Interconnect

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FEATURES

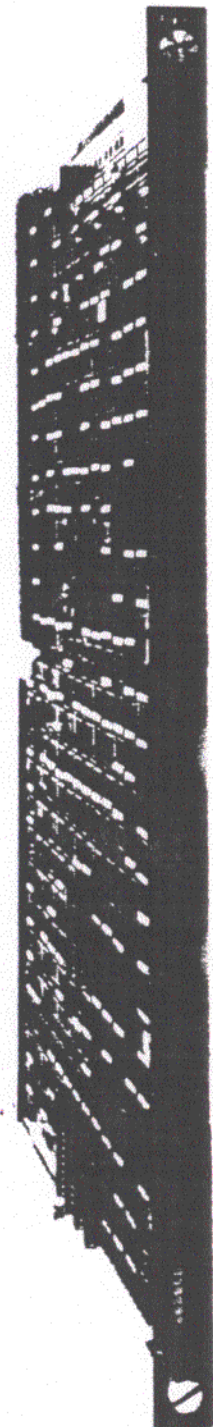
- Conforms to section 10 of the FASTBUS modular high-speed data acquisition system specification (IEEE Standard 960)
- Conforms to all SI Type S-1 specifications
- Full duplex operation
- Capable of fully transforming FASTBUS addresses
- Route tables are downloaded to RAM, fixed in PROM or simply buffered
- Switch-selectable Cable Segment lengths
- Implemented in ECL technology to minimize transmission latency
- Circuit board utilizes multi-wire technology

GENERAL DESCRIPTION

The Model F900 Type S-1 Segment Interconnect is a single-width FASTBUS module designed to provide the primary data path for communications between FASTBUS Segments in a multi-crate environment. The F900 SI provides the link between two independent asynchronous buses, the Crate Segment (backplane) and the Cable Segment, via the Crate Auxiliary connector. The F900 permits the formation of a FASTBUS system of arbitrary connection complexity having simultaneous system wide communication with independent multi-processing capability at the local level.

The F900 allows standard FASTBUS operations (i.e., single-word transfers, multi-word block transfers, and broadcast) to pass between otherwise autonomous segments in a manner transparent to the user with minimal transmission latency. This unit permits the 8-bit group field of the FASTBUS address to be simply buffered or fully transformed (mapped) and passed to the far side (opposite port).

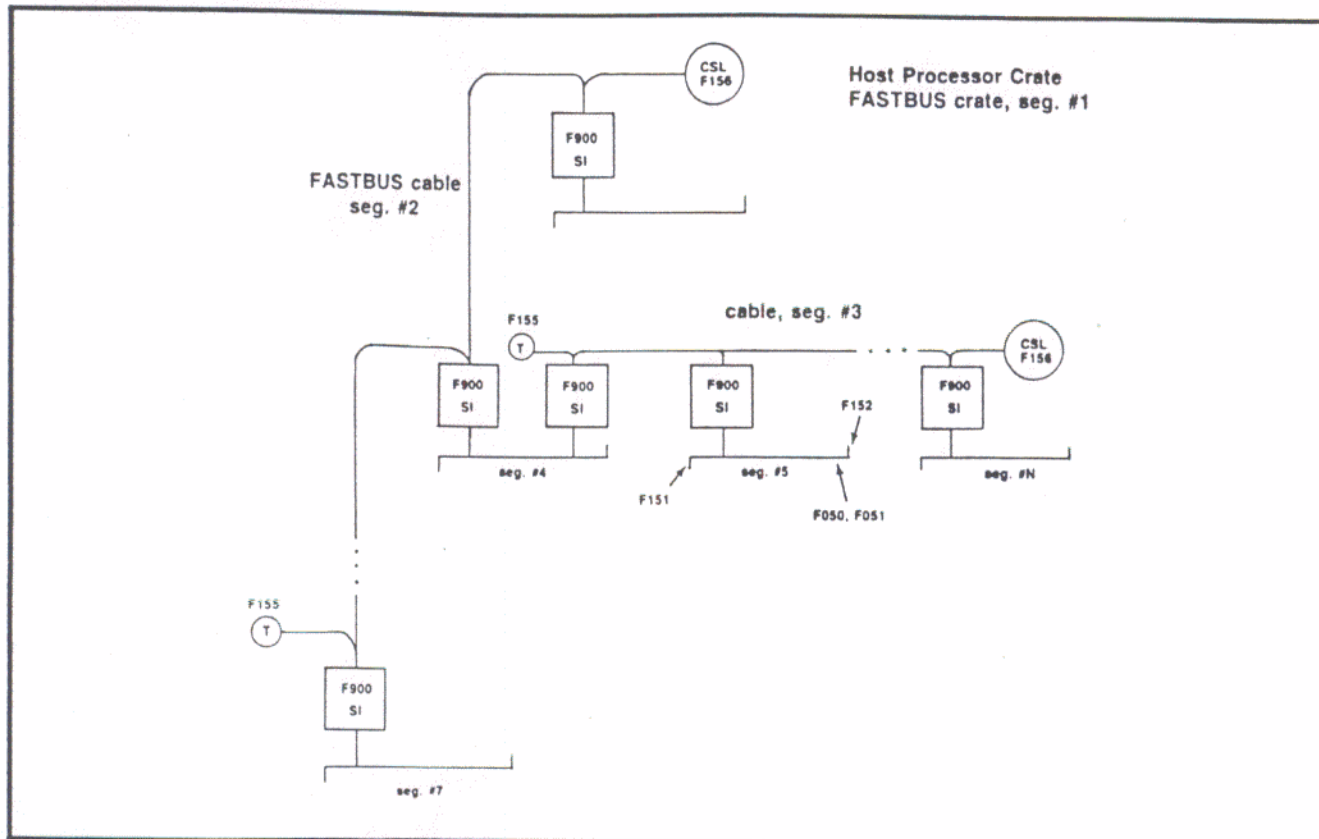
Typically, the F900 Cable Segment port will connect to one or more F900s residing on the Cable Segment in order to link the crate backplane segments as shown in the following connection diagram. Other FASTBUS modules may also reside on the Cable Segment. However, the Cable Segment Ancillary Logic Cards (F156 and F155) with cable terminators are mandatory.



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TYPICAL APPLICATION



POWER REQUIREMENTS

- 5.2V — 13.0A
- 2.0V — 7.0A
- + 5.0V — 1.0A

ORDERING INFORMATION

Weight: 1.6 kg (3.6 lb.)

- Model F900-A01** — Segment Interconnect
- Model F900-A02** — Segment Interconnect w/F155-A11 Cable Segment Terminator Card
- Accessories** —
 - Model F020-A01 - Module Extraction/Insertion Tool
 - Model F155-A11 - Cable Segment Terminator Card w/o Resistors
 - Model F155-A12 - Cable Segment Terminator Card w/100 ohm Resistors
 - Model F156-A01 - Cable Segment Ancillary Logic Card
 - Model F290-A01 - Display Module
 - Model F914-A01 - Q-bus® Processor Interface
 - Model 5820-B10J - 60 Conductor Twist-N-Flat Ribbon Cable 1 Meter
 - Model 5820-B100 - 60 Conductor Twist-N-Flat Ribbon Cable 10 Meter